Table 1. Comparison of EPA and State of North Dakota PSD Modeling Methodology

	Overall Approach	Step 1	Step 2
EPA's PSD Modeling Procedure (January 2002). Temporally and Spatially Consistent	PSD increment calculations are based on changes in SO2 concentrations from a specific time (temporally) and location (spatially) in the base year.	Model net changes in emissions (between baseline and current year) sequentially for each 24-hour time period with at least 5-years of met data.	When the resulting maximum daily impacts from Step 1 are compared to the 5 $\mu g/m^3$ PSD increment there are eight exceedances of the 24-hour increment (see EPA Figure 4).

	Overall Approach	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
State of North Dakota's PSD Modeling Procedure (April 2002). Not Temporally Consistent	PSD increment calculations are spatially, but <u>not</u> temporally consistent.	Model baseline emissions concentration (1976-1977).	Determine the second-highest concentration at each receptor.	Add 5 $\mu g/m^3$ to the second-highest concentration at each receptor. Establish a "maximum allowable ambient level." [MAAL]	Model current year emissions with the same met data.	Compare the second-high prediction for the current year to the previously determined MAAL in Step 3.	Compliance with the increment is assumed if the second-high prediction in the current year is lower than the MAAL. There are no exceedances.